

Attachment D  
Consent Order

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4**

<b>IN THE MATTER OF:</b>	)	Docket No. SDWA-04-2020-2301
	)	
City of Jackson, Mississippi,	)	<b>ADMINISTRATIVE COMPLIANCE</b>
	)	<b>ORDER ON CONSENT</b>
Respondent.	)	
	)	Proceeding pursuant to Section 1414(g) of
Public Water System, PWS ID. No. MS0250008.)	)	the Safe Drinking Water Act, 42 U.S.C.
	)	§ 300g-3(g).

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**I. STATUTORY AUTHORITY**

1. This Administrative Compliance Order on Consent (“AOC”) is issued to the City of Jackson, Mississippi (“Respondent” or “City”) pursuant to the authority vested in the Administrator of the U.S. Environmental Protection Agency (“EPA”) by Section 1414(g) of the Safe Drinking Water Act (“SDWA”), 42 U.S.C. § 300g-3(g). The Administrator has delegated this authority to the Regional Administrator of EPA Region 4, who has, in turn, delegated this authority to the Director of the Enforcement Compliance and Assurance Division.

**II. EPA’s FINDINGS OF FACT AND CONCLUSIONS OF LAW**

2. Respondent is a municipality created under the laws of the State of Mississippi and is therefore a “person” as that term is defined in the SDWA. 42 U.S.C. § 300f(12); 40 C.F.R. § 141.2.

3. Respondent owns and/or operates a public water system located in the City of Jackson, Mississippi, PWS ID No. MS0250008 (“System”). The System provides water for human consumption to a population of approximately 173,514.<sup>1</sup>

4. The System is a “public water system” within the meaning of Section 1401(4) of the SDWA, 42 U.S.C. § 300f(4); 40 C.F.R. § 141.2.

5. The System regularly serves at least 25 year-round residents and is therefore a “community water system” (“CWS”) within the meaning of Section 1401(15) of the SDWA, 42 U.S.C. § 300f(15), and 40 C.F.R. § 141.2.

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<sup>1</sup> Until approximately October 2014, there were two separately identified public drinking water systems owned by the City. One was supplied entirely by groundwater and identified under the PWS ID No. MS0250012; the other was supplied by surface water and identified under the PWS ID No. MS0250008. In or around October 2014, the City requested the removal of the PWS ID No. MS0250012, as the City intended to stop utilizing the groundwater sources as primary sources of drinking water. At the time of the EPA’s Civil Investigation (“Investigation”), the EPA identified that the groundwater sources were still being utilized as a primary source for a portion of the distribution and requested that the PWS ID No. MS0250012 be reinstated for the groundwater portion of the system. In or around July 2020, MSDH reinstated the PWS ID No. MS0250012. This Order addresses only those violations alleged to have occurred in the surface water system, PWS ID No. MS0250008.

6. Respondent's ownership and/or operation of the System makes it a "supplier of water" within the meaning of Section 1401(5) of the SDWA, 42 U.S.C. § 300f(5), and 40 C.F.R. § 141.2, and subject to the requirements of Part B of the SDWA, 42 U.S.C. § 300g, the National Primary Drinking Water Regulations ("NPDWRs") at 40 C.F.R. Part 141, and the Mississippi Primary Drinking Water Regulations ("MPDWRs"), promulgated pursuant to the Mississippi Safe Drinking Water Act of 1997 ("MSDWA"), Miss. Code Ann. § 41-26-1 et. seq.

7. Pursuant to SDWA Section 1413, 42 U.S.C. § 300g-2, the Mississippi State Department of Health ("MSDH" or the "State") has primary responsibility for the implementation and enforcement of the public water supply program in Mississippi.

8. Requirements of, or permits issued to Respondent under, the MSDWA and its implementing regulations are "applicable requirements" pursuant to Section 1414(i)(4) of the SDWA, 42 U.S.C. § 300g-3(i)(4), and may therefore be enforced by the EPA under Section 1414(g)(1) of the SDWA, 42 U.S.C. § 300g-3(g)(1).

9. The System consists of two water treatment plants, known as the O.B. Curtis Water Treatment Plant ("O.B. Curtis WTP")<sup>2</sup> and the J.H. Fewell Water Treatment Plant ("J.H. Fewell WTP"),<sup>3</sup> and appurtenant collection, treatment, storage, and distribution facilities.

10. The surface water sources that contribute to the System are the Ross Barnett Reservoir, which serves O. B. Curtis WTP, and the Pearl River, which serves the J. H. Fewell WTP.

11. The O.B. Curtis and J.H. Fewell WTPs employ conventional filtration with ultraviolet ("UV") systems to inactivate pathogens. The O.B. Curtis WTP also employs a membrane filtration system for a portion of the water that goes through this WTP. Finished water at the WTPs is disinfected using chloramines.

12. UV disinfection treatment is installed on each conventional individual filter effluent ("IFE") flow at the O.B. Curtis WTP and on each high service pump at the J.H. Fewell WTP to treat for viruses, including *Cryptosporidium* and *Giardia*. Pursuant to 40 C.F.R. § 141.720(d)(3)(ii), systems must treat at least 95% of the water delivered to the public during each month by UV reactors operating within validated conditions for the required UV dose.

13. The System is required to provide filtration pursuant to 40 C.F.R. §§ 141.73, 141.173, 141.719(b), and 141.720(d); and disinfection pursuant to 40 C.F.R. §§ 141.72(b) and 141.172.

14. The term "contaminant" means any physical, chemical, biological, or radiological substance or matter in water." 42 U.S.C. § 300f(6).

15. Turbidity is a measure of the cloudiness of water. It is used to indicate water quality and filtration effectiveness (such as whether disease-causing organisms are present). Higher turbidity levels are often associated with the potential for higher levels of disease-causing microorganisms.

<sup>2</sup> To the EPA's knowledge and belief, the O.B. Curtis WTP was initially constructed in or around 1992.

<sup>3</sup> To the EPA's knowledge and belief, the J.H. Fewell WTP was initially constructed in or around 1914.

16. Lead, *E. coli*, *Cryptosporidium*, *Giardia*, haloacetic acids (HAA5), and total trihalomethanes (TTHM) are contaminants under the meaning of 42 U.S.C. § 300f(6) and are or may be present in the System.

17. On November 22, 2019, the EPA issued a Request for Information to Respondent, pursuant to Section 1445 of the SDWA, 42 U.S.C. § 300j-4, and 40 C.F.R. § 141.31, seeking information to determine Respondent's compliance with federal drinking water regulations.

18. On December 23, 2019, Respondent provided its response to the EPA's Request for Information.

19. On January 15 and 16, 2020, consistent with the requirements of Section 1445(b)(1), 42 U.S.C. § 300j-4(b)(1), the EPA notified MSDH and Respondent, respectively, of its intent to inspect the System.

20. On February 3 to 7, 2020, representatives of the EPA conducted an Investigation of the System, pursuant to its authority under Section 1445(b)(1) of the SDWA, 42 U.S.C. § 300j-4(b)(1).

21. On March 30, 2020, the EPA transmitted a copy of the Civil Investigation Report to the Respondent, which identified a number of concerns related to bacterial contamination and proper disinfection.

22. Effective April 2, 2020, the EPA issued Respondent an Emergency Administrative Order, Docket No. SDWA-04-2020-2300 ("Emergency Order"), pursuant to Section 1431 of the SDWA, 42 U.S.C. § 300i(a).

23. In the Emergency Order, the EPA found that Respondent had NPDWR violations and that conditions existed within the System that presented an imminent and substantial endangerment to the health of persons served by the System. The NPDWR violations alleged in the Emergency Order included, but were not limited to:

a. At the time of the Investigation, Respondent could not perform membrane integrity testing at O.B. Curtis WTP due to wear and breakage of the system components and compressor, in contravention of 40 C.F.R. § 141.719; and

b. NDPWRs require a system's combined filtered water at each plant be less than or equal to 0.3 NTU in at least 95% of the measurements taken each month, and the turbidity level of a system's combined filtered water at each plant must at no time exceed 1 NTU. Turbidity exceedances were reported at both the O.B. Curtis and J.H. Fewell WTPs in the January 2020 monthly operating report ("MOR"). Finished water turbidity reached 1.35 NTU at the O.B. Curtis WTP and 3.00 NTU at the J.H. Fewell WTP. Additionally, at the O.B. Curtis WTP, 93.5% of turbidity samples were equal to or less than the turbidity limit of 0.3 NTU. At the time of the Investigation, the EPA's inspectors observed that the continuous turbidity monitoring equipment at the O.B. Curtis WTP had read inaccurately for approximately three years due to a lack of calibration and maintenance, and that turbidity samples were taken during that time period at a frequency of once per shift, for a total of three times per day. Given that the turbidity monitoring equipment was not operational, the system, to maintain compliance with NPDWRs, should have

conducted grab sampling every four hours in lieu of continuous monitoring, but for no more than five working days following the nonoperation of the equipment.

24. In order to ensure that the System has appropriate treatment equipment and appropriate information to make treatment decisions, and that the water quality is properly measured for compliance with NPDWRs, the Emergency Order required Respondent to submit a Comprehensive Equipment Repair Plan (“CERP”) for the EPA’s review and approval, including a schedule of implementation, to repair and/or replace monitoring equipment and repair, replace, and/or perform maintenance on the appurtenant treatment equipment. The Emergency Order also required the Respondent to fix the dosing process for disinfection and pH control; to increase reporting and notice requirements for exceedances of turbidity requirements; provide boil water notices to the public as required under 40 C.F.R. Part 141, Subpart Q, and provide notice thereof to the EPA; develop and implement, after specific triggering events, an Alternative Water Source Plan; provide Revised Total Coliform Rule (“RTCR”) sampling data to the EPA; provide the information to be summarized in its monthly operating reports on a weekly basis to the EPA; and provide weekly updates on compliance with the Emergency Order.

25. Although Respondent developed a CERP, the EPA has not approved the CERP as of the Effective Date of this AOC because the parties have not reached mutual agreement on the schedules of implementation for the items included therein. Respondent has reported that some work, including repairs and/or replacement, has been completed or is ongoing. Respondent has not yet fully completed the tasks identified therein, including the repair, replacement and/or maintenance of much of the equipment identified as needing such work.

26. On May 11, 2020 and April 26, 2021, the EPA issued Notices of Noncompliance to Respondent detailing additional violations beyond those previously identified in the Emergency Order. The allegations contained in these Notices of Noncompliance are detailed more fully below, where such alleged noncompliance has not been fully resolved as of the Effective Date of this AOC and/or where the EPA believes additional compliance measures are required at this time to address such noncompliance.

27. Miss. Admin. Code § 15-20-72.2.2.1(5) requires that a certified Class A operator shall be onsite whenever the treatment plant for a Class A public water system treating surface water is in operation. The System is a Class A public water system because it has surface water treatment, groundwater under the direct influence of surface water, lime softening, or coagulation and filtration for the removal of constituents other than iron or manganese. See Miss. Admin. Code § 15-20-72.2.2.1(5).

A review of the City’s operating logbooks, provided to the EPA by MSDH on March 11, 2020, and records of discussions between the City, the EPA and MSDH indicate that the System is not always fully covered by a Class A certified operator. Therefore, the City is in noncompliance with the MPDWR, Miss. Admin. Code § 15-20-72.2.2.1(5), for failure to maintain certified operators to operate the facilities.

28. 40 C.F.R. § 141.719(b)(3) and Miss. Admin. Code § 15-20-72.1.7.1 require that a PWS must conduct direct integrity testing of membrane units at a frequency of not less than once per day that the membrane unit is in operation to demonstrate removal efficiencies.



During the February 2020 Investigation and upon review of the City's subsequent MORs, the EPA found that the City was unable to perform direct integrity testing of the membrane units at O.B. Curtis WTP on a number of occasions due to wear and breakage of components and/or malfunctioning equipment. Therefore, the City failed to comply with 40 C.F.R. § 141.719(b)(3) and Miss. Admin. Code § 15-20-72.1.7.1.

29. 40 C.F.R. § 141.719(b)(4) and Miss. Admin. Code § 15-20-72.1.7.1 require that a PWS conduct continuous indirect integrity monitoring on each membrane unit unless the system implements continuous direct integrity testing of membrane units in accordance with the criteria in 40 C.F.R. § 141.719 (b)(3)(i) through (v). If indirect integrity monitoring includes turbidity and if the filtrate turbidity readings are above 0.15 nephelometric units ("NTU"), the PWS must immediately perform direct integrity testing on the associated membrane unit in accordance with 40 C.F.R. § 141.719(b)(3). Pursuant to 40 C.F.R. § 141.719(b)(3), the direct integrity testing log removal value ("LRV") for the membrane units at the O.B. Curtis WTP must be greater than or equal to the control limit<sup>4</sup> of 4, or else it is considered to have failed the direct integrity testing and the System must remove the membrane unit from service, conduct a direct integrity test to verify any repairs, and may return the membrane unit to service only if the direct integrity test is within the control limit. See 40 C.F.R. § 141.719(b)(3)(v).

As indicated by a review of the City's MORs, on multiple days between March 2020 and April 2021, the indirect integrity monitoring of the membrane units at the O.B. Curtis WTP showed turbidity readings greater than 0.15 NTU. Subsequent direct integrity testing, when able to be performed, showed failures of several of the membrane units due to LRVs lower than the control limit of 4. As stated in the MORs for these periods, the City did not remove these membrane units from service, as required by 40 C.F.R. § 141.719(b)(3)(v). Therefore, the City failed to comply with 40 C.F.R. §§ 141.719(b)(3)(v) and 141.719(b)(4) and Miss. Admin. Code § 15-20-72.1.7.1.

30. Pursuant to 40 C.F.R. § 141.132(b)(2) and Miss. Admin. Code § 15-20-72.1.3.6, a PWS using chlorine dioxide for disinfection or oxidation must conduct daily monitoring for chlorite.

On February 5, 2020, the EPA observed the System treating with chlorine dioxide at the J.H. Fewell WTP. However, the February 2020 MOR stated that the System did not use chlorine dioxide at the J.H. Fewell WTP on February 5, 2020, nor did the report show that the System conducted the required monitoring on that date for chlorite.<sup>5</sup> Therefore, the City did not conduct daily monitoring and failed to comply with 40 C.F.R. §§ 141.132(b)(2) and Miss. Admin. Code § 15-20-72.1.3.6.

31. Pursuant to 40 C.F.R. § 141.80(c) and Miss. Admin. Code § 15-20-72.1.3.2, the lead action level is exceeded if the concentration of lead in more than 10% of tap water samples collected during any monitoring period conducted in accordance with 40 C.F.R. § 141.86 is greater than 0.015 mg/L, (i.e., if the "90th percentile" lead level is greater than 0.015 milligrams per liter ("mg/L") (or 15 parts per billion ("ppb"))). Under 40 C.F.R. § 141.80(e), any PWS exceeding the lead action level shall implement all applicable source water treatment requirements specified by the State under

<sup>4</sup> Under 40 C.F.R. § 141.719(b)(3)(iv), a System must establish a control limit within the sensitivity limits of the direct integrity test that is indicative of an integral membrane unit capable of meeting the removal credit awarded by the State. This control limit is known as the minimum log removal value and is set by the primary enforcement agency for membrane treatment systems (in this matter, MSDH).

<sup>5</sup> According to the State, Respondent currently has the ability to use chlorine dioxide (ClO<sub>2</sub>) for manganese removal at both the J.H. Fewell WTP and O.B. Curtis WTP, but not for disinfection.

40 C.F.R. § 141.83. Pursuant to 40 C.F.R. § 141.83, any PWS exceeding the lead action level must complete source water monitoring and make treatment recommendations to the State within 180 days after the end of the monitoring period during which the lead action level was exceeded. The State then makes a determination regarding source water treatment, and, if necessary, the State may require the PWS to install and operate such treatment.

The System exceeded the lead action level of 0.015 mg/L for the following monitoring periods: January – June 2015; January – June 2016; and July – December 2016. On February 12, 2016, MSDH issued a compliance plan to the City to address the lead action level exceedances (“ALEs”). As a result of the June 2015 lead ALE, the City conducted an optimal corrosion control treatment (“OCCT”) study between October 2016 and April 2017 and provided the recommended treatment to MSDH on June 13, 2017. MSDH concurred with the recommended treatment and provided a deadline of May 31, 2019 to complete source water treatment installation. MSDH later extended the completion date to December 2019; yet, the City failed to install OCCT at the J.H. Fewell WTP in accordance with the State’s deadline. Therefore, the City failed to comply with 40 C.F.R. §§ 141.80(e) and 141.83 and Miss. Admin. Code § 15-20-72.1.3.2, when it failed to install OCCT and provide applicable source water treatment by the December 2019 deadline. The City subsequently conducted an OCCT study amendment in 2021 and presented its results and recommended source water treatment to MSDH in a February 2021 report. MSDH accepted the results and recommended source water treatment plan on June 4, 2021. Given that the City’s report recommended a different source water treatment than identified in its initial 2017 OCCT study, and that MSDH established new deadlines for completion of the source water treatment, the OCCT remains unaddressed at J.H. Fewell WTP as of the Effective Date of this AOC.

32. Pursuant to 40 C.F.R. § 141.82(g) and Miss. Admin. Code § 15-20-72.1.4.3, all systems optimizing corrosion control shall continue to operate and maintain OCCT, including maintaining water quality parameters (“WQPs”) at or above minimum values or within ranges designated by the State under 40 C.F.R. § 141.82(f). A water system is out of compliance with the requirements of 40 C.F.R. § 141.82(g) for a six-month period if it has excursions for any State-specified WQP on more than nine days during the period. An excursion occurs whenever the daily value for one or more of the WQPs measured at a sampling location is below the minimum value or outside the range designated by the State. PWSs are required to report any WQP sampling results to the State, pursuant to 40 C.F.R. § 141.90(a). Additionally, PWSs must provide the public notice of treatment technique requirement violations (such as WQP excursions) within 30 days of learning of the violation, pursuant to 40 C.F.R. § 141.203 and Miss. Admin. Code § 15-20-72.1.5.2.

A review of the City’s WQP sampling records indicates that the City failed to comply with the lead and copper rule (“LCR”) treatment technique requirements for the applicable pH and/or alkalinity WQPs<sup>6</sup> for at least the following monitoring periods:

- January – June 2016 (144 days of excursions of WQPs);
- July – December 2016 (179 days of excursions of WQPs);
- January – June 2017 (183 days of excursions of WQPs);

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<sup>6</sup> In its June 4, 2021 acceptance of the OCCT study amendment recommendations, MSDH set interim WQPs for the System, effective July 1, 2021, and final WQPs, to be effective January 1, 2023. The WQPs referenced in this paragraph are the WQPs in place as of June 4, 2021.

- July – December 2017 (186 days of excursions of WQPs);
- January – June 2018 (167 days of excursions of WQPs);
- July – December 2018 (183 days of excursions of WQPs);
- January – June 2019 (89 days of excursions of WQPs);
- July – December 2019 (59 days of excursions of WQPs);
- January – June 2020 (181 days of excursions of WQPs);
- July – December 2020 (63 days of excursions of WQPs); and
- January – June 2021 (42 days of excursions, through April 28, 2021).

According to the State, the City failed to report the WQP violations to the State and did not provide public notification for the following monitoring periods: July – December 2016; January – June 2017; and July – December 2017. Therefore, the City failed to comply with 40 C.F.R. §§ 141.82(g), 141.90(a), and 141.203 and Miss. Admin. Code §§ 15-20-72.1.4.3 and 72.1.5.2 for failure to maintain optimal WQPs and provide the appropriate public notification.

33. Pursuant to 40 C.F.R. § 141.723(d) and Miss. Admin. Code § 15-20-72.1.4.1, a PWS must correct any significant deficiencies identified in an EPA- or State-conducted sanitary survey in accordance with EPA- or State-approved schedules.

On November 18, 2016, MSDH conducted a sanitary survey, during which MSDH made a finding of inadequate application of treatment chemicals and techniques. On May 12, 2017, MSDH issued a significant deficiency report citing the System for failure to achieve the target hardness and alkalinity goals [*i.e.*, WQPs], and thereafter issued a compliance plan to the System, requiring improvements to the System be completed by December 29, 2019 to bring the System into compliance. The City failed to complete the required compliance measures at the System by the December 29, 2019 deadline established by the State, and, according to the State, has still not completed these compliance measures as of the Effective Date of this AOC. Therefore, the City is in noncompliance with 40 C.F.R. § 141.723(d) and Miss. Admin. Code § 15-20-72.1.4.1.

34. Pursuant to 40 C.F.R. §§ 141.80(f) and 141.84(a) and Miss. Admin. Code § 15-20-72.1.3.2, a water system that fails to meet the lead action level in tap samples taken pursuant to 40 C.F.R. § 141.86(d)(2), after installing corrosion control and/or source water treatment (whichever sampling occurs later), shall replace lead service lines in accordance with the requirements of 40 C.F.R. § 141.84 and Miss. Admin. Code § 15-20-72.1.1.6(8).

Pursuant to 40 C.F.R. § 141.84(b), a water system shall replace annually at least seven percent (7%) of the initial number of lead service lines in its distribution system. The initial number of lead service lines is the number of lead lines in place at the time the replacement program begins. The system shall identify the initial number of lead service lines in its distribution system, including an identification of the portion(s) owned by the system, based on a materials evaluation, including the evaluation required under § 141.86(a) and legal authorities (e.g., contracts, local ordinances) regarding the portion owned by the system. The first year of lead service line replacement shall begin on the first day following the end of the monitoring period in which the action level was exceeded.

The System exceeded the lead action level of 0.015 mg/L for the following monitoring periods: January – June 2015; January – June 2016; and July – December 2016. Therefore, the City



was required to commence its lead service line replacement program in June 2015. Despite exceeding the lead action level on several occasions, the City has failed to implement a lead service line replacement program at any time from June 2015 to the present.<sup>7</sup> Therefore, the City is in noncompliance with 40 C.F.R. §§ 141.80(f) and 141.84 and Miss. Admin. Code § 15-20-72.1.1.6(8).

35. Pursuant to 40 C.F.R. § 141.86(a)(1) and Miss. Admin. Code § 15-20-72.1.3.2, each water system shall complete a materials evaluation of its distribution system in order to identify a pool of targeted sampling sites that meets the requirements of this section, and which is sufficiently large to ensure that the water system can collect the number of lead and copper tap samples required in 40 C.F.R. § 141.86(c). Systems shall use the information on lead, copper and galvanized steel that it is required to collect under 40 C.F.R. § 141.42(d) when conducting a materials evaluation, including identifying the presence of certain construction materials in the distribution system.

As of the Effective Date of this AOC, Respondent has not provided EPA with a complete materials evaluation, utilizing the information specified in 40 C.F.R. § 141.86(a)(2), to identify potential lead service lines, which was required when the LCR was promulgated in 1991.

36. Pursuant to 40 C.F.R. § 141.64(b)(2) and Miss. Admin. Code 15-20-72.1.2.6, the maximum contaminant level (MCL) for total HAA5 is 60 micrograms per liter (µg/L), determined as a locational running annual average<sup>8</sup> (LRAA) at each monitoring location. Systems must include the highest LRAA for HAA5 and the range of individual sample results for all monitoring locations expressed in the same units as the MCL. If more than one location exceeds the HAA5 MCL, the System must include the LRAA for all locations that exceed the MCL.

As stated in a public notice issued by the City to its consumers on March 31, 2021, as required under 40 C.F.R. § 141.629, the City's testing results from 4th Quarter 2020 and 1st Quarter 2021 show that the System exceeded the HAA5 MCL during those periods. The level of HAA5 averaged at one of the System's locations for 4th Quarter 2020 was 66 µg/L, and for 1st Quarter 2021 was 65 µg/L. Therefore, the City is in noncompliance with 40 C.F.R. § 141.64(b)(2) and Miss. Admin. Code 15-20-72.1.2.6.

37. Based on the findings above, the EPA has determined that the System has numerous SDWA violations, including violations of the NPDWRs.

### **III. AGREEMENT ON CONSENT**

Based on the foregoing FINDINGS, and pursuant to the authority of Section 1414(g) of the SDWA, 42 U.S.C. § 300g-3(g), the EPA is issuing this AOC, to place the Respondent on an enforceable schedule to comply with 40 C.F.R. Part 141 and applicable requirements of Miss. Admin. Code. **The EPA hereby ORDERS and Respondent hereby AGREES:**

<sup>7</sup> Although the City has prepared a draft Lead Service Line Replacement Program Plan for the EPA's approval, a review of the EPA's files and correspondence with the City indicates that the Plan has not been finalized, nor has it been implemented by the City to date.

<sup>8</sup> The locational running annual average is the average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. 40 C.F.R. § 141.2.

38. Public Notification. Upon the Effective Date of this AOC, Respondent shall carry out the public notice requirements as required by 40 C.F.R. Part 141, Subpart Q for all future violations of the NPDWRs.

39. Comprehensive Staffing Plan. Within thirty (30) days of the Effective Date of this AOC, Respondent shall provide the EPA with a Comprehensive Staffing Plan. This Plan shall include the staff's primary duty location (i.e., either O.B. Curtis or J.H. Fewell), role(s), and years of experience in that role along with including date of original certification(s). Additionally, Respondent's Plan shall identify how it will ensure that a Class A operator is onsite at all times, including any backup plans in case staff are unavailable.

40. Comprehensive Equipment Repair Plan. The Comprehensive Equipment Repair Plan is incorporated herein as Appendix A, and includes items to be addressed by Respondent. Immediately upon receipt of this AOC, Respondent shall begin implementation of the tasks described in Appendix A in accordance with the schedules of implementation identified therein, including interim milestones, maintenance schedules, and completion deadlines. If, at any time after the Effective Date of this AOC Respondent determines that revisions are required, including extension of timeframes in accordance with Paragraph 50 below, Respondent shall submit a request for revision to the EPA at least ten (10) days prior to implementing any changes explaining why revisions are required and shall not begin implementing such revisions until EPA approval is received. If the EPA determines, during the term of this AOC, that revisions are required, the EPA will notify Respondent in writing of such revisions and Respondent shall submit such revisions to the EPA within thirty (30) days of receipt of the EPA's determination and shall implement such revisions in accordance with the EPA's approval and any associated schedule. Once a task is completed, Respondent shall submit documentation demonstrating completion. Documentation may include, but is not limited to, state concurrence, a contractor work completion acknowledgement, or another document approved by EPA.

41. Asset Management Plan Development and Implementation.

a. Within sixty (60) days of the Effective Date of this AOC, Respondent shall provide a scope of work for the EPA's review and approval for development of an Asset Management Plan. The Asset Management Plan shall include detailed asset inventories (including, at minimum, age, condition, and criticality), operation and maintenance tasks, and long-range financial planning. The scope of work shall include interim milestones and timeframes for completion of the Asset Management Plan. Completion of the Asset Management Plan shall be accomplished within nine (9) months of the EPA's approval of the scope of work. The Asset Management Plan must include an evaluation of all Respondent's assets to facilitate effective and efficient system-wide operational sustainability. See the attached, "*Asset Management: A Best Practices Guide*," for guidance on this topic.<sup>9</sup> The Asset Management Plan must be developed by a qualified entity, and Respondent shall include in its scope of work a description of the entity that will develop the Plan. See the attached, "*Building an Asset Management Team*,"<sup>10</sup> for

<sup>9</sup> Additional resources on Asset Management can be found at the following EPA website: <https://www.epa.gov/sustainable-water-infrastructure/asset-management-water-and-wastewater-utilities>. These resources are provided for informational purposes, and do not constitute regulatory requirements.

<sup>10</sup> Available at <https://nepis.epa.gov/Exe/ZyPDF.cgi/P1000LTZ.PDF?Dockkey=P1000LTZ.PDF>.

guidance on this topic. Interim milestones and timeframes contained in the approved scope of work will be enforceable pursuant to this AOC.

b. The Asset Management Plan shall be submitted to EPA for review and approval in accordance with the timeframes contained in the above referenced scope of work. Upon the EPA's approval of the Asset Management Plan, the Plan shall become an enforceable requirement of this AOC. Respondent shall begin implementation of the Asset Management Plan immediately upon receipt of EPA's approval.

42. LCR Corrosion Control Treatment. Within seven (7) days the Effective Date of this AOC, Respondent shall submit to the EPA, for review and approval, a copy of the OCCT Study Amendment report. A proposed treatment plan shall be submitted as outlined in Appendix A, Item 40. Until EPA concurrence is received on the proposed treatment plan, Respondent shall make any revisions as requested by the EPA. Upon receipt of the EPA's concurrence on the proposed treatment plan, the plan will become an enforceable component of this AOC.

43. LCR Materials Evaluation and Lead Service Line Replacement.

a. Within thirty (30) days of the Effective Date of this AOC, Respondent shall submit to the EPA for review and approval a plan for development of an updated materials evaluation which complies with the requirements of 40 C.F.R. § 141.86 and Miss. Admin. Code § 15-20-72, and shall submit the completed materials evaluation within six (6) months of EPA's approval of the materials evaluation plan.

b. Within thirty (30) days of the completed materials evaluation, Respondent shall develop and provide to the EPA for review and concurrence an updated Lead Service Line Replacement Program Plan ("LSLRPP") that identifies timeframes for implementing the identified activities and addresses EPA's comments. The LSLRPP shall include how Respondent will address current inventory and future inventory; how Respondent plans to begin replacement as required by 40 C.F.R. § 141.84; and how the information gathered through the evaluation steps will be utilized to update the materials evaluation and sample siting plans, as necessary.

c. Within fifteen (15) days of receipt of the EPA's concurrence on the revised LSLRPP, Respondent shall begin implementation of the LSLRPP. This shall continue, at a minimum, until such time as Optimal Corrosion Control has been installed and is determined to be effective based on follow-up sampling.

44. Stage 2 Disinfection Byproducts Requirements.

a. Respondent shall conduct monitoring quarterly for TTHM and HAA5 in accordance with 40 C.F.R. § 141.621(a) and its state approved monitoring plan. Samples shall be analyzed in accordance with 40 C.F.R. § 141.621(b). Respondent shall calculate the LRAAs for TTHM and HAA5 using monitoring results collected, in accordance with 40 C.F.R. § 141.620(d). Specifically, Respondent must calculate compliance with the MCL based on the available data from the most recent four

quarters.

b. Within thirty (30) days of the Effective Date of this AOC, Respondent shall submit documentation that all public notice requirements specified in 40 C.F.R. Part 141, Subpart Q have been completed for the DBP MCL violations noted in this AOC. Thereafter, Respondent must continue to repeat public notice quarterly until the violations have been resolved.

c. Respondent shall submit to the EPA, in addition to routine reporting to MSDH, the results of the monitoring required pursuant to 40 C.F.R. § 141.621 by the 10<sup>th</sup> day of the month following the end of the calendar quarter within which the sample was collected in accordance with 40 C.F.R. § 141.629. Respondent shall report quarterly to the EPA until directed otherwise.

45. Reporting and Notification.

a. Effective immediately upon the Effective Date of this AOC and until further notice by the EPA, or termination of this AOC pursuant to Section IV, whichever comes first, Respondent shall submit MOR information weekly as follows:

- i. Reports must run from Sunday to Saturday each week;
- ii. Weekly reports must be submitted to the EPA by Tuesday of the following week (*e.g.*, for the monitoring timeframe of Sunday, July 5 through Saturday, July 11, the report must be submitted by Tuesday, July 14).
- iii. Respondent shall report the MOR in the formatting requested by the EPA.

b. Respondent shall continue to submit the WQP sampling data to the EPA for a period of twelve (12) months following the Effective Date of this AOC, which may be extended by the EPA if data indicates noncompliance or if submission of such data is not timely or complete at any time during this twelve (12)-month period. The data shall be reported as follows:

- i. WQP results for the entry points to the distribution system sampling shall be included with the weekly MOR submittals.
- ii. WQP results for the tap sampling shall be submitted within fifteen (15) days of the end of each month (*e.g.*, for the monitoring timeframe of July 1 through July 31, the results must be submitted by August 15, 2021).

c. Effective immediately upon the Effective Date of this AOC and until further notice by the EPA or Termination of this AOC pursuant to Section IV, whichever comes first, if and when Respondent uses chlorine dioxide for disinfection or oxidation at either J.H. Fewell WTP or O.B. Curtis WTP, Respondent shall conduct daily monitoring for chlorite on each such day. Respondent shall include chlorite



monitoring data on a weekly basis with its MOR information, as required under Paragraph 45(a) above.

d. Effective immediately upon the Effective Date of this AOC and until further notice by the EPA, or termination of this AOC pursuant to Section IV, whichever comes first, Respondent shall submit weekly updates to the EPA as follows:

i. Weekly updates shall include the Respondent's progress in complying with this AOC and identify any failures to comply with the AOC as well as any violations that occurred during the previous week.

ii. Reports must run from Sunday to Saturday each week;

iii. Weekly updates shall be submitted with the weekly MORs to the EPA by Tuesday of the following week (e.g., for the monitoring timeframe of July 1 through July 31, the results must be submitted by August 3, 2021).

iv. Weekly updates shall follow the format provided by the EPA and be submitted electronically.

e. Respondent shall send all reports, notifications, documentation and submittals required by this AOC in writing via e-mail to:

U.S. EPA, Region 4  
Enforcement and Compliance Assurance Division  
Attn: Amanda Driskell  
Email: [driskell.amanda@epa.gov](mailto:driskell.amanda@epa.gov)

AND

U.S. EPA, Region 4  
Enforcement and Compliance Assurance Division  
Attn: Bryan Myers  
Email: [myers.bryan@epa.gov](mailto:myers.bryan@epa.gov)

f. All reports, notifications, documentation, and submissions required by this AOC must be signed by a duly authorized representative of the Respondent and must include the following statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the

possibility of fine and imprisonment for knowing violations.”

#### **IV. FINAL REPORT AND TERMINATION OF AOC**

46. Within thirty (30) calendar days after Respondent has fully completed and implemented the actions required by Section III (Agreement on Consent) of this AOC, including work outlined in the CERP, Respondent shall submit for the EPA’s review and approval a final report (Final Report) that includes: (a) a description of all of the actions which have been taken toward achieving compliance with this AOC; (b) an assessment of the effectiveness of such actions; and (c) an analysis of whether additional actions beyond the scope of this AOC are necessary to further comply with the SDWA and this AOC.
47. If the EPA determines, after review of the Final Report, that all the requirements of this AOC have been completed and implemented in accordance with this AOC and no further actions are necessary to comply with the SDWA, the EPA will provide notice to Respondent and this AOC shall be deemed terminated.
48. If the EPA determines, after review of the Final Report, that, despite all the requirements of this AOC having been completed and implemented in accordance with this AOC, further actions are necessary to comply with the SDWA, the NPDWRs, and the MPDWRs, the Parties agree that this AOC may be amended to reflect such necessary additional actions. Such amendment must be agreed to in writing to become effective under this AOC.
49. If the EPA determines that any requirement has not been completed and implemented in accordance with this AOC, the EPA will notify the Respondent, provide a list of deficiencies, and may require Respondent to modify its actions as appropriate in order to correct such deficiencies. If so required, Respondent shall implement the modified and approved requirement(s) and submit a modified Final Report in accordance with the EPA notice. Failure by Respondent to implement any of the approved modified requirement(s) shall be a violation of this AOC.
50. Notwithstanding the provisions above, the EPA may extend any timeframe contained in this AOC (including, but not limited to, Appendix A) upon a showing of good cause as to why such timeframe (interim or final) cannot be achieved. Such extensions of time to the tasks in Appendix A shall be in writing, but may be incorporated into a revision to Appendix A and not necessarily in a revision or amendment to this AOC.

#### **V. GENERAL PROVISIONS**

51. Nothing in this AOC shall constitute a waiver, suspension, or modification of SDWA, the MSDWA, their respective implementing regulations, or terms and conditions of any permit issued thereunder to Respondent, which remain in full force and effect.
52. Failure to comply with the requirements herein shall constitute a violation of this AOC and the SDWA, and may subject the Respondent to penalties as provided in Section

1414(g)(3) of the SDWA, 42 U.S.C. § 300g-3(g)(3), as amended by the Federal Civil Penalties Inflation Adjustment Act of 1990, as amended, and as codified by the EPA at 40 C.F.R. Part 19.

53. Respondent's compliance with this AOC does not necessarily constitute compliance with the provisions of the SDWA, 42 U.S.C. § 300f et seq.; the MSDWA, Miss. Code Ann. § 41-26-1 et. seq.; or their respective implementing regulations.
54. Any sampling done to comply with the terms of this AOC shall be done in a manner consistent with EPA approved methodologies. The EPA reserves the right to require Respondent to conduct additional sampling if the EPA determines that Respondent's sampling is not being conducted in accordance with EPA-approved methodologies.
55. This AOC addresses only those violations alleged herein. Nothing in this AOC shall be construed as relieving the Respondent of its obligation to comply with all applicable provisions of federal, state, or local law, nor shall it be construed to be a ruling on, or determination of, any issue related to any other federal, state, or local permit. Compliance with this AOC shall not be a defense to any actions subsequently commenced pursuant to federal laws and regulations administered by the EPA.
56. Issuance of this AOC shall not be deemed as prohibiting, altering, or in any way limiting the ability of the EPA to pursue any other enforcement actions available to it under law. Such actions may include, without limitation, any administrative, civil, or criminal action to seek penalties, fines, injunctive, or other appropriate relief, or to initiate an action for imminent and substantial endangerment under the SDWA or any other federal or state statute, regulation, or permit.
57. The EPA reserves all rights and remedies, legal and equitable, available to enforce any violation cited in this AOC and to enforce this AOC.
58. Nothing in this AOC is intended to nor shall be construed to operate in any way to resolve any criminal liability of Respondent, or other liability resulting from violations that were not alleged in this AOC.
59. This AOC applies to and is binding upon Respondent and its officers, directors, employees, agents, successors, and assigns.
60. Any change in the legal status of Respondent, including but not limited to any transfer of assets of real or personal property, shall not alter Respondent's responsibilities under this AOC.
61. Respondent admits to the jurisdictional allegations set forth within this AOC.
62. Respondent neither admits nor denies the factual allegations set forth within this AOC.
63. Respondent waives any and all claims for relief and otherwise available rights or remedies to judicial or administrative review which Respondent may have with respect to any issue

of fact or law set forth in this AOC, including, but not limited to any right of judicial review of the AOC under the Administrative Procedure Act, 5 U.S.C. §§ 701-706.

64. Each party shall bear its own costs and attorneys' fees in connection with the action resolved by this AOC.
65. Pursuant to Section 1414(g)(2) of the SDWA, 42 U.S.C. § 300g-3(g)(2), the EPA has conferred with and sent a copy of this AOC to the State of Mississippi.
66. Each undersigned representative of the parties to this AOC certifies that he or she is fully authorized to enter the terms and conditions of this AOC and to execute and legally bind that party to it.

**VI. EFFECTIVE DATE**

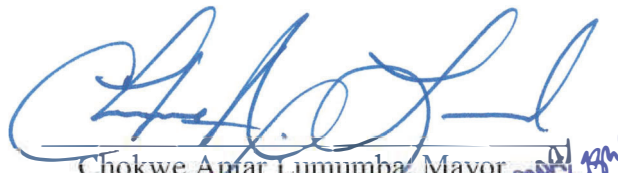
67. This AOC shall become effective on the date on which Respondent receives a fully executed copy of this AOC, after signature by the Director, EPA Region 4 Enforcement and Compliance Assurance Division.

**VII. MULTIPLE COUNTERPARTS**

68. This AOC may be executed in counterparts, each of which shall be deemed to be an original but all of which taken together shall constitute one and the same agreement.

FOR THE RESPONDENT:

6/30/2021  
Date

  
Chokwe Antar Lumumba, Mayor  
City of Jackson, Mississippi

SO ORDERED this \_\_\_\_\_ day of 7/1/21, 20\_\_\_\_.

**CAROL KEMKER** Digitally signed by CAROL KEMKER  
Date: 2021.07.01 10:07:19 -04'00'

Carol L. Kemker, Director  
Enforcement and Compliance Assurance Division  
Region 4



**APPENDIX A**  
**Comprehensive Equipment Repair Plan (CERP) Schedule of Implementation**

APPENDIX A Comprehensive Equipment Repair Plan (CERP) Schedule of Implementation			
Task#	Plant and/or Category	Task	Deadline or Timeframe
<b>General Tasks</b>			
1	Operator/Staffing	City will hire an Instrument Technician for O.B. Curtis	Within 3 months of order effective date.
2	Operator/Staffing	2. Provide documentation of completion or 2.A. Submit documentation of funding for an additional two (2) operators for O.B. Curtis. 2.B. City will hire 2 unlicensed operators for O.B. Curtis in FY2020-21.	2. Within 1 month of order effective date. or 2.A and 2.B Within 6 months of order effective date.
3	Operator/Staffing	Both operations new hires should be eligible for licensure and must complete testing for Class A Waterworks	Within 7 months of order effective date.
<b>Fewell</b>			
4	Clari-Trac	Clari-Trac System shall be functioning and operational and repairs completed for all Basins including Butterfly Valves, Actuators, Drives, and Vacuum Hoses. 4. Provide documentation of completion or 4.A. Contact Manufacturer and identify necessary work/schedule and submit Scope of Work* to EPA; 4.B. Clari-Trac system shall be fully functional and operational with all repairs completed	4. Within 1 month of order effective date. or 4.A. Within 30 days of order effective date 4.B. Within 6 months of order effective date
5	UV Reactors	UV Sensors - Functional and fully operational. 5. Provide documentation of completion or 5.A. Order parts identified on the parts list provided by the Technician report from the 1/19/2021 evaluation. Provide the Technician Report/parts list and date parts were ordered to EPA. 5.B. Return all UV Sensors to fully functional/operational status.	5. Within 1 month of order effective date. or 5.A. Within 30 days of order effective date 5.B. Within 6 months of order effective date
6	Filters	6. COJ will develop a Scope of Work* with timeframes for returning filters to fully operational and functional status. Upon EPA approval of Scope of Work/plan, the CERP will be updated to include the individual tasks and timeframes.	Within 60 days of order effective date
7	Monitoring Equip	7.A. Flow Measurement Devices - Research and assessment completed 7.B Flow Measurement Devices -will be functional and fully operational.	7.A. Within 30 days of order effective date 7.B. Within 6 months of order effective date

APPENDIX A Comprehensive Equipment Repair Plan (CERP) Schedule of Implementation			
Task#	Plant and/or Category	Task	Deadline or Timeframe
8	Monitoring Equip	8. Provide documentation of completion or 8.A. Submit a status report for all turbidimeters, to include current status (operational or not) and what repairs/replacement is needed for each item. 8.B. Return all to fully operational status.	8. Within 1 month of order effective date. or 8.A. Within 30 days of order effective date 8.B. Within 3 months of order effective date
9	Intake Structure	Pedestrian Bridge	Within 6 months of order effective date
10	Entire Plant	Corrosion Control report	Within 30 days of order effective date
Curtis			
11	Conventional - Chlorine Room	Weight Indicator - 11.A Parts ordered 11.B Functional and fully operational.	11.A. Within 30 days of order effective date 11.B. Within 90 days of order effective date
12	Conventional - Chlorine Room	HS#1 - Documentation showing functioning and operational.	Within 30 days of order effective date
13	Conventional - All Conventional Basins	Clari-Trac System shall be functioning and operational and repairs completed for all Basins including Butterfly Valves, Actuators, Drives, and Vacuum Hoses. 13.A. Contact Manufacturer and identify necessary work/schedule and submit Scope of Work to EPA*; 13.B. Clari-Trac system shall be fully functional and operational with all repairs completed	13.A. Within 30 days of order effective date 13.B. Within 7 months of order effective date
14	Conventional - Turbidimeters for Basis 1, 2, 3	14. Provide documentation of completion or 14.A. Submit a status report for all turbidimeters, to include current status (operational or not) and what repairs/replacement is needed for each item. 14.B. Return all to fully operational status.	14. Within 1 month of order effective date. or 14.A. Within 30 days of order effective date 14.B. Within 3 months of order effective date
15	Conventional - UV Filter Gallery	UV #5 - Operational and Fully functional	Within 30 days of order effective date
16	Membrane - HS#2	Chlorine analyzers - Operational and Fully functional. Provide documentation of replacement of one chlorine analyzer and installation of second chlorine analyzer	Within 1 month of order effective date.
17	Membrane - Blower Room	Blower C - 17. Provide documentation of completion or 17.A Assessment of root cause completed 17.B Submit plan to address the concerns identified in assessment. Upon EPA approval of the plan, Appendix A will be updated to include those individual tasks and timeframes	17. Within 1 month of order effective date. or 17.A. Within 30 days of order effective date 17.B. Within 60 days of order effective date
18	Conventional-Intake	Microscreens -18. Provide documentation of completion or 18.A. Submit status report for the microscreens, include current status and any needed repairs/replacement; 18.B. Complete any needed repairs/replacement	18. Within 1 month of order effective date. or 18.A. Within 30 days of order effective date 18.B. Within 60 days of order effective date
19	Conventional-Intake	60-inch sluice gate -19. Provide documentation of completion or 19.A. Submit status report, include current status and any needed repairs/replacement; 19.B. Complete any needed repairs/replacement	19. Within 1 month of order effective date. or 19.A. Within 30 days of order effective date 19.B. Within 60 days of order effective date

APPENDIX A Comprehensive Equipment Repair Plan (CERP) Schedule of Implementation			
Task#	Plant and/or Category	Task	Deadline or Timeframe
20	Conventional-Intake	72-inch sluice gate - 20. Provide documentation of completion or 20.A. Submit status report, include current status and any needed repairs/replacement; 20.B. Complete any needed repairs/replacement	20. Within 1 month of order effective date. or 20.A. Within 30 days of order effective date 20.B. Within 60 days of order effective date
21	Both - Intake	Roof Repairs/Potassium Permanganate feeder	Within 3 months of order effective date.
22	Membrane - Intake	Microscreens -22. Provide documentation of completion or 22.A. Submit status report for the microscreens, include current status and any needed repairs/replacement; 22.B. Complete any needed repairs/replacement	22. Within 1 month of order effective date. or 22.A. Within 30 days of order effective date 22.B. Within 60 days of order effective date
23	Membrane - Intake	60-inch sluice gate - 23. Provide documentation of completion or 23.A. Submit status report, include current status and any needed repairs/replacement; 23.B. Complete any needed repairs/replacement	23. Within 1 month of order effective date. or 23.A. Within 30 days of order effective date 23.B. Within 60 days of order effective date
24	Membrane - Sludge Plant Handling Facility	Gravity Thickener #1 and #2 - Functional and Fully Operational	Within 5 months of order effective date.
25	Both - Filters	Filter Rehab - Submit detailed Scope of Work*. Upon approval of the Scope of Work, the tasks will be updated to include additional milestones and final completion of this task.	Within 60 days of order effective date
26	Membrane - Trains #1-6	26.A. Submit a report on the current status and any needed repairs/replacement for each membrane train and its components including sluice gate, flocculator, centrifuge, reject valve, turbidimeter and rapid mixer. 26.B. Submit detailed Scope of Work* to address the identified concerns, including any sequencing. Upon approval of the Scope of Work, the tasks will be updated to include additional milestones and final completion of this task.	26.A. Within 30 days of order effective date 26.B. Within 60 days of order effective date
27	Membrane - Cover	Complete Membrane Basin Building Structure Project.	Within 6 months of order effective date
28	Conventional - Soda Ash System	dilution system - - Functional and Fully Operational - Provide documentation of completion or repair the dry powder level indicators	Within 30 days of order effective date
<b>Groundwater System-Storage Tank</b>			
29	Storage Tanks	Maddox Rd (Hwy 18) - Provide documentation that tank is fully functioning and operational.	Within 30 days of order effective date
30	Storage Tanks	TV Rd Booster Station - Submit plan for bringing back into service.	Within 6 months of order effective date



APPENDIX A Comprehensive Equipment Repair Plan (CERP) Schedule of Implementation			
Task#	Plant and/or Category	Task	Deadline or Timeframe
31	Wells	Provide a status and plan for each of the wells, include a status of each well, identify any need repairs/replacement, and propose timeframe for addressing these repairs/replacement including any interim steps. Upon EPA approval of the plan, Appendix A will be updated to include those individual tasks and timeframes for each well.	Within 60 days of order effective date
32	Well House	Well Houses - Submit Scope of Work* including proposed timeframes. Upon EPA approval of the Scope of Work, Appendix A will be updated to include those individual tasks and timeframes.	Within 60 days of order effective date
<b>Dosing Automation</b>			
33	Curtis	O.B. Curtis: Submit detailed Scope of Work*, that includes schedule of tasks and timeframes for completion of interim and final tasks. Upon approval of the Scope of Work, Appendix A will be amended to add additional tasks/timeframes for completion of automation.	Within 60 days of order effective date
34	Curtis	Ammonia/Chlorine Feeds: All chlorinator and ammoniator equipment and appurtenances will be fully functional with automatic, flow-pacing capabilities in service and redundancy present. Submit detailed Scope of Work*, that includes schedule of tasks and timeframes for completion of interim and final tasks. Upon approval of the Scope of Work, Appendix A will be amended to add additional tasks/timeframes for completion of automation.	Within 60 days of order effective date

APPENDIX A Comprehensive Equipment Repair Plan (CERP) Schedule of Implementation			
Task#	Plant and/or Category	Task	Deadline or Timeframe
35	Curtis	ACH (Aluminum Chlorohydrate) (coagulant): The treatment system was installed by using the same method as the Alum/lime system that was previously being used and not tweaked for the new ACH coagulant. Studying the coagulation system to determine if CO2 treatment addition will be helpful in improving the treatment system for future automation. Submit detailed Scope of Work*, that includes schedule of tasks and timeframes for completion of interim and final tasks. Upon approval of the Scope of Work, Appendix A will be amended to add additional tasks/timeframes for completion of automation.	Within 60 days of order effective date
36	Curtis	O.B. Curtis: Potassium Permanganate Feeds: flow pacing or feedback loop. Submit detailed Scope of Work*, that includes schedule of tasks and timeframes for completion of interim and final tasks. Upon approval of the Scope of Work, Appendix A will be amended to add additional tasks/timeframes for completion of automation.	Within 60 days of order effective date
37	Curtis	O.B. Curtis: Fluoride - Submit detailed Scope of Work*, that includes schedule of tasks and timeframes for completion of interim and final tasks. Upon approval of the Scope of Work, Appendix A will be amended to add additional tasks/timeframes for completion of automation.	Within 60 days of order effective date
38	Curtis	O.B. Curtis: pH metering information: Replaced/Repaired and are being calibrated as required. Information from the meters is not fed directly into the chemical feeding systems, but manually by operators. This can result in missing peaks. Submit detailed Scope of Work*, that includes schedule of tasks and timeframes for completion of interim and final tasks. Upon approval of the Scope of Work, Appendix A will be amended to add additional tasks/timeframes for completion of automation.	Within 60 days of order effective date

APPENDIX A Comprehensive Equipment Repair Plan (CERP) Schedule of Implementation			
Task#	Plant and/or Category	Task	Deadline or Timeframe
39	Curtis	O.B Curtis: Raw Water Flow Meter - Conventional plant (related to the Clari-Trac System): Not currently running automatically. Submit detailed Scope of Work*, that includes schedule of tasks and timeframes for completion of interim and final tasks. Upon approval of the Scope of Work, Appendix A will be amended to add additional tasks/timeframes for completion of automation.	Within 60 days of order effective date
40	Fewell	The dosing equipment has always been run in manual for disinfection and pH at the Fewell plant. 40.A. Submit a plan to complete research/assessment; 40.B. Based on research,submit work proposal, which should include a proposed treatment plan; 40.C. Complete work.	Task 40.A will be due one month after approval of OCCT Study Findings Plan and Task 40.B will be due two months after approval. Upon approval, Appendix A will be updated to include completion timeframe for Task40.C A proposed treatment plan shall include a scope of work, timeframes for completion of any necessary treatment modifications, and identify funding for implementation of the treatment plan.

\*The Scope of Work (SOW) submitted to the EPA must contain detailed descriptions of all work necessary to successfully complete the Task listed in this AOC. The SOW must include all interim steps, including completion dates and/or timeframes to complete each interim step. In addition to completion dates/timeframes for each interim step, the SOW must also contain the deadline (date) for the completion of the entire Task. Scope of Works may be combined if tasks will all be a part of same project.

The EPA understands that the City may not be able to provide exact completion dates due to the complex nature of some Tasks included in the AOC. If the City is unable to project exact dates of completion for each interim step necessary to complete a Task, the City must, at a minimum, describe the interim steps necessary to complete each Task, along with timeframes that the City reasonably expects to be necessary for each interim step to be completed. For example, if the City has a requirement to submit and receive approval of a "Plans and Specs" document to the MSDH as an interim step, the SOW could include a statement similar to, "The City will submit "Plans and Specs" document for review and approval to the MSDH. Within two (2) weeks of MSDH approval of "Plans and Specs" document, the City will put the work out for bid."

This level of detail must be provided for each interim step necessary to complete each Task identified in the AOC. Without specific, detailed SOWs, including interim steps and completion dates or timeframes for completion, the EPA is unable to adequately review and approve the SOW proposed by the City.